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|  |                     |   |
|--|---------------------|---|
| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b><br>(Only for new nonprovisional applications under 37 CFR 1.53(b)) | Attorney Docket No. | BKL:113 (c) US                                      |
|  | First Inventor      | Juliana H. J. Brooks                                |
|  | Title               | Improvements in Fuel Cells and Electrochemical Reac |
|  | Express Mail Label  | EU 004297947 US                                     |

|   |  |
|---|--|
| <b>APPLICATION ELEMENTS</b><br>See MPEP chapter 600 concerning utility patent application contents.   | <b>ADDRESS TO:</b><br>Commissioner for Patents<br>Mail Stop Patent Application<br>P. O. Box 1450<br>Alexandria VA 22313-1450   |
| 1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17)<br>(Submit an original, and a duplicate for fee processing)<br>2. <input checked="" type="checkbox"/> Applicant claims small entity status.<br>See 37 CFR 1.27.<br>3. <input checked="" type="checkbox"/> Specification [Total Pages <b>250</b> ]<br>(preferred arrangement set forth below)<br>- Descriptive title of the invention<br>- Cross Reference to Related Applications<br>- Statement Regarding Fed sponsored R & D<br>- Reference to sequence listing, a table,<br>or a computer program listing appendix<br>- Background of the Invention<br>- Brief Summary of the Invention<br>- Brief Description of the Drawings (if filed)<br>- Detailed Description<br>- Claim(s)<br>- Abstract of the Disclosure<br>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <b>70</b> ]<br>5. Oath or Declaration [Total Pages <b>1</b> ]<br>a. <input type="checkbox"/> Newly executed (original or copy)<br>b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d))<br>(for continuation/divisional with Box 18 completed)<br>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br>Signed statement attached deleting inventor(s)<br>named in the prior application, see 37 CFR<br>1.63(d)(2) and 1.33(b).<br>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 | 7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or<br>Computer Program (Appendix)<br>8. Nucleotide and/or Amino Acid Sequence Submission<br>(if applicable, all necessary)<br>a. <input type="checkbox"/> Computer Readable Form (CRF)<br>b. Specification Sequence Listing on:<br>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or<br>ii. <input type="checkbox"/> Paper<br>c. <input type="checkbox"/> Statements verifying identity of above copies |

**ACCOMPANYING APPLICATION PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))  
 10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
 (when there is an assignee)  
 11. ☐ English Translation Document (if applicable)  
 12. ☐ Information Disclosure ☐ Copies of IDS  
 Statement (IDS)/PTO-1449 Citations  
 13. ☐ Preliminary Amendment  
 14. ☒ Return Receipt Postcard (MPEP 503)  
 (Should be specifically itemized)  
 15. ☐ Certified Copy of Priority Document(s)  
 (if foreign priority is claimed)  
 16. ☐ Nonpublication Request under 35 U.S.C. 122  
 (b)(2)(B)(i). Applicant must attach form PTO/SB/35  
 or its equivalent.  
 17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No.: **PCT/US03/08241**

Prior application information:

Examiner

Group / Art Unit:

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**
☒ Customer Number or Bar Code Label

☐ Correspondence address below

(Insert Customer No. or Attach bar code label here)

**26818**

|         |                                      |           |              |          |              |
|---------|--------------------------------------|-----------|--------------|----------|--------------|
| Name    | Mark G. Mortenson                    |           |              |          |              |
|         | PATENT TRADEMARK OFFICE              |           |              |          |              |
|         | The Law Offices of Mark G. Mortenson |           |              |          |              |
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Name (Print/Type) **Mark G. Mortenson**

Registration No. (Attorney/Agent)

**31,182**

Signature

Date

**July 9, 2003**

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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17958 U.S. PTO  
10/615666  
07/09/03

# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) \$375.00

## Complete if Known

Application Number  
Filing Date July 9, 2003  
First Named Inventor Juliana H. J. Brooks  
Examiner Name  
Group Art Unit  
Attorney Docket No. BKL:113 (c) US

### METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number

Deposit Account Name

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments

☐ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

### FEE CALCULATION

#### 1. BASIC FILING FEE

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |          |
| 1001         | 750      | 2001         | 375      | Utility filing fee     | 375.00   |
| 1002         | 330      | 2002         | 165      | Design filing          |          |
| 1003         | 520      | 2003         | 260      | Plant filing fee       |          |
| 1004         | 750      | 2004         | 375      | Reissue filing         |          |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |          |
| SUBTOTAL (1) |          |              |          |                        | (\$)     |

#### 2. EXTRA CLAIM FEES FOR UTILITY AND

| Extra Claims       |         | Fee from below |   | Fee Paid |
|--------------------|---------|----------------|---|----------|
| Total Claims       |         |                |   |          |
| 6                  | -20** = | 0              | X | 0.00     |
| 3                  | -3** =  | 0              | X | 0.00     |
| Multiple Dependent |         |                |   |          |

| Large Entity |          | Small Entity |          | Fee Description  |
|--------------|----------|--------------|----------|--|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |
| 1201         | 84       | 2201         | 42       | Independent claims in excess of 3                          |
| 1203         | 280      | 2203         | 140      | Multiple dependent claim, if not paid                      |
| 1204         | 84       | 2204         | 42       | ** Reissue independent claims over original patent         |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$) \$375.00

\*\*or number previously paid, if greater; For Reissues, see above

### FEE CALCULATION (continued)

#### 3. ADDITIONAL FEES

| Large Entity |          | Small Entity |          | Fee Description  | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |          |
| 1051         | 130      | 2051         | 65       | Surcharge - late filing fee or oath  |          |
| 1052         | 50       | 2052         | 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053         | 130      | 1053         | 130      | Non - English specification  |          |
| 1812         | 2,520    | 1812         | 2,520    | For filing a request for <i>ex parte</i> reexamination                     |          |
| 1804         | 920*     | 1804         | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805         | 1,840*   | 1805         | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251         | 110      | 2251         | 55       | Extension for reply within first month                                     |          |
| 1252         | 410      | 2252         | 205      | Extension for reply within second month                                    |          |
| 1253         | 930      | 2253         | 465      | Extension for reply within third month                                     |          |
| 1254         | 1,450    | 2254         | 725      | Extension for reply within fourth month                                    |          |
| 1255         | 1,970    | 2255         | 985      | Extension for reply within fifth month                                     |          |
| 1401         | 320      | 2401         | 160      | Notice of Appeal   |          |
| 1402         | 320      | 2402         | 160      | Filing a brief in support of an appeal                                     |          |
| 1403         | 280      | 2403         | 140      | Request for oral hearing   |          |
| 1451         | 1,510    | 1451         | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452         | 110      | 2452         | 55       | Petition to revive - unavoidable   |          |
| 1453         | 1,300    | 2453         | 650      | Petition to revive - unintentional   |          |
| 1501         | 1,300    | 2501         | 650      | Utility issue fee (or reissue)   |          |
| 1502         | 470      | 2502         | 235      | Design issue fee   |          |
| 1503         | 630      | 2503         | 315      | Plant issue fee  |          |
| 1460         | 130      | 1460         | 130      | Petitions to the Commissioner  |          |
| 1807         | 50       | 1807         | 50       | Processing fee under 37 CFR § 1.17(q)                                      |          |
| 1806         | 180      | 1806         | 180      | Submission of Information Disclosure Statement                             |          |
| 8021         | 40       | 8021         | 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809         | 750      | 2809         | 375      | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 1810         | 750      | 2810         | 375      | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 1801         | 750      | 2801         | 375      | Request for Continued Examination (RCE)                                    |          |
| 1802         | 900      | 1802         | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

### SUBMITTED BY

Name (Print/Type) Mark G. Mortenson

Registration No. 31,182  
(Attorney/Agent)

### Complete (if applicable)

Telephone 410-287-8795

Signature

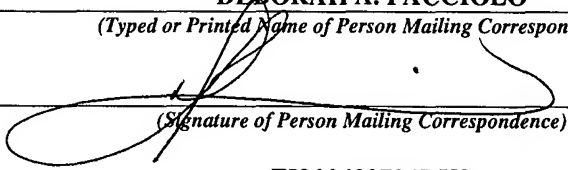
Date

July 9, 2003

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|   |                                    |          |                                     |  |
|---|------------------------------------|----------|-------------------------------------|--|
| <b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)</b><br>Applicant(s): JULIANA H. J. BROOKS, ET AL  |                                    |          | Docket No.<br><b>BKL:113 (C) US</b> |  |
| Serial No.  | Filing Date<br><b>JULY 9, 2003</b> | Examiner | Group Art Unit                      |  |
| Invention:<br><b>OPTIMIZING REACTIONS IN FUEL CELLS AND ELECTROCHEMICAL REACTIONS</b>   |                                    |          |                                     |  |
| <p>I hereby certify that this <u>SPEC (250 ); DWGS (70 ); TRANS. (3P); CK 2158; CERT. OF MAIL; POSTCARD</u><br/> <i>(Identify type of correspondence)</i></p> <p>is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Director of the United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on <u>JULY 9, 2003</u><br/> <i>(Date)</i></p> <div style="text-align: center; margin-top: 20px;"> <u>DEBORAH A. FACCILOLO</u><br/> <i>(Typed or Printed Name of Person Mailing Correspondence)</i><br/> <br/> <i>(Signature of Person Mailing Correspondence)</i> </div> <div style="text-align: center; margin-top: 10px;"> <u>EU 004297947 US</u><br/> <i>("Express Mail" Mailing Label Number)</i> </div> |                                    |          |                                     |  |
| Note: Each paper must have its own certificate of mailing.  |                                    |          |                                     |  |